

REMARKS

By this preliminary amendment, the title and the abstract are amended, claims 1-16 are canceled and new claims 17-132 are added. Accordingly, claims 17-132 are pending.

New claim 96 is supported by, for example, the description in lines 10-16 on page 43 and lines 3-8 on page 44 of the specification and Fig. 14F of the drawings as originally filed. The specification describes relatively rotating a toric optical member by a correction or rotation amount that has been determined. Fig. 14F illustrates a first toric optical member 1A, 2A, a second toric optical member 1B, 2B and a third toric optical member 1C, 2C in a projection optical system (between the first plane and the second plane) that are relatively rotated a determined amount.

New claims 114 and 116 are supported by, for example, the description in lines 9-11 on page 14 of the specification. New claims 117, 119, 124 and 126 are supported by, for example, the description in lines 8-12 on page 44 of the specification.

Thus, it is respectfully submitted that no new matter is added.

The January 16, 2003, Office Action in the parent application objected to the title because the title did not reflect the fact that a method as well as an apparatus is being claimed. The title is amended accordingly.

The Office Action also objected to the abstract because the Office Action considered the term "comprises" to constitute legal phraseology and because the abstract did not indicate that a method as well as an apparatus is being claimed. The abstract is amended accordingly.

The Office Action objected to the oath as being defective. However, the Office Action did not acknowledge receipt of the Supplemental Declaration in compliance with 37 C.F.R. 1.63(b)(2) and 37 C.F.R. 1.67(b) filed on January 13, 2003. Copies of the Supplemental Declaration and date stamped filing receipt are submitted herewith for the Examiner's convenience.

The Office Action rejected claims 96-106 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse the rejection.

As discussed above, claim 96 is supported by the specification as originally filed. Therefore, one skilled in the art would recognize that the inventors had possession of the invention recited in claims 96-106 at the time the application was filed. Accordingly, it is respectfully submitted that claims 96-106 fully comply with 35 U.S.C. §112.

The Office Action maintained the rejection of claims 17-91, 94 and 95 under 35 U.S.C. §103(a) over 4,919,524 to Shinohara in view of 6,078,380 to Taniguchi et al. Further, the Office Action asserted that the Applicants' arguments are "not well taken" because "[I]t is quite clear" from the entire disclosure of Shinohara (and from the entire disclosure of Taniguchi et al.) "that at least four lens surfaces are disclosed as being used in the optical projection system of Shinohara wherein at least one of the second and/or third lens surfaces are moved symmetrically or asymmetrically along the optical axis of the projection system to correct the magnification ratio or an optical characteristic of the projection optical system."

Applicants agree that Shinohara discloses at least four lens surfaces in a projection optical system in which at least one of the second and/or third lens surfaces are moved symmetrically or asymmetrically along the optical axis to change the magnification ratio. However, this is not what is recited in the claims. The Office Action failed to address the features recited in the claims, apparently improperly asserting that the "gist" or "thrust" of the invention is taught by the references. See MPEP §2141.02.

Applicants respectfully reassert that neither Shinohara nor Taniguchi et al. discloses, teaches or suggests an optical adjusting unit including at least four surfaces which are

disposed in an optical path between the reticle and the substrate and which have rotationally asymmetric power with respect to an optical axis, as recited in claims 17 and 27. Shinohara discloses at least four lens surfaces, but fails to disclose that the four lens surfaces have rotationally asymmetric power. The fact that the second and third lens groups may be moved symmetrically or asymmetrically along an optical axis to vary the magnification ratio while keeping the object-to-image distance constant, as taught by Shinohara, does not teach or suggest four lens surfaces which have rotationally asymmetric power.

Taniguchi et al. does not overcome the deficiencies of Shinohara. While Taniguchi et al. discloses movement of lenses 20, 21a, 21b, 22 and 23 by a plurality of extendible drive elements 25, 27, 57 and 58 to correct for the optical characteristics of a projection optical system, nowhere does Taniguchi et al. teach or suggest that any of the lenses have rotationally asymmetric power with respect to an optical axis.

As such, it is respectfully submitted that the previously asserted combination of Shinohara and Taniguchi et al. does not disclose, teach or suggest each and every feature recited in independent claims 17 and 27.

The Office Action similarly failed to address the features recited in independent claims 36, 45, 57, 62, 67, 68, 69, 72, 80, 83, 86, 94, 96 and 101. Thus, the Office Action failed to provide the required factual basis to establish a prima facie case of obviousness. In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Further, to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See, In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). The Office Action did not identify any specific disclosure in the applied references that allegedly teaches or suggests the features recited in the claims. Instead, the Office Action improperly asserted the entirety of

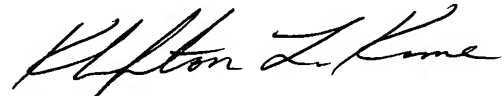
the disclosures of the applied references as disclosing certain concepts, rather than explaining how the references allegedly teach the features recited in the claims.

Furthermore, because the Office Action failed to provide any response to the arguments presented with respect to independent claims 36, 45, 57, 62, 67, 68, 69, 72, 80, 83 and 86, those arguments are hereby respectfully reasserted.

In view of the foregoing, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 17-132 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Abstract

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